

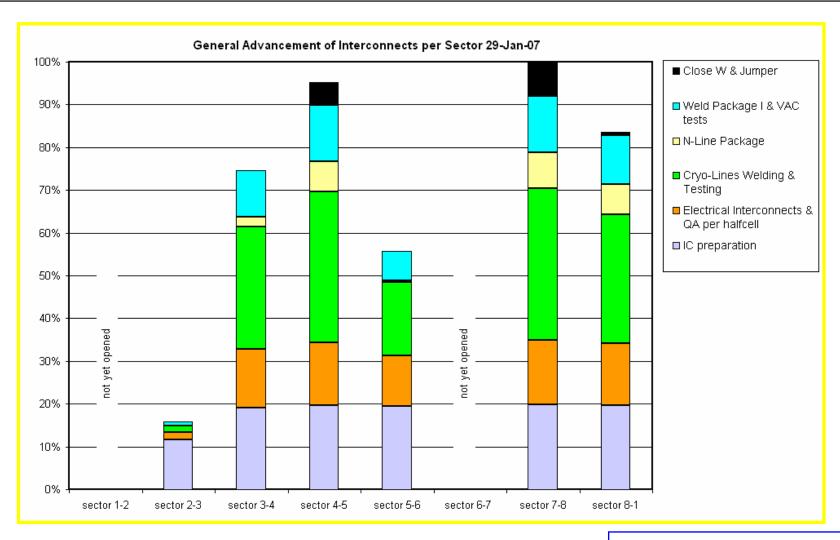
LHC Arc Interconnections: monthly update

F. Bertinelli / AT-MCS

(on behalf of IC Team)



Weekly Report: from C. Vollinger



from Weekly IC Report: C. Vollinger

Specific news

- ➤ Sector 4-5:
 - 8th VAC sector closed today and available
- ➤ Sector 8-1:
 - 2 VAC sectors will be closed next week
 - Hot issue: what testing on 8-1 once the last arc IC is closed? Proceed with tests, do not wait for triplet repair ...
- share resources for jumper welding (1 team)
 - ➤ introduce a 2nd team for welding Z bellows in week 06/07
- ACR (AL) work to repair jumper bellows finished
 - > still count on ACR support to adjust the "cages d'ecureils", measure special sleeves lengths
- share resources for closing W bellows
 - dedicate a team for reopening after VAC tests
 - dedicate 2 PEFRAs to this team
- MEL reabsorbed backlog from week 51/06: thanks!
- urgent ongoing work for components (P. Fessia, M. Struik): PIMs, jumper sleeves order this week,...

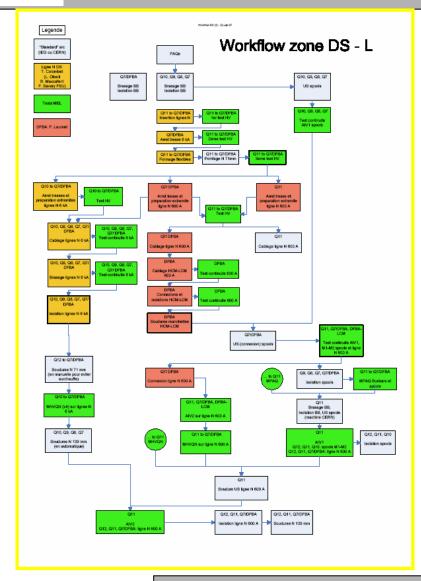
Specific news ctd.

Sector 6-7:

- BR + US starting with 1 team next week 06/07
- > parallel IC work on 6 sectors (supervision effort, quality...)
- current Master Plan allows only 20 weeks for this sector (and for 1-2), optimistic !!!
- > Sector 3-4:
 - DFBLC at Point 3 needed in time for pressure test of 3-4: please push !!!
- > Sector 2-3:
 - Q11R2 for installation !!!
- > Point 6, Sectors 5-6 and 6-7:
 - IFS modifications for beam dump will have effect on DS areas



Activity in DS area



- additional personnel involved thanks to involvement of MCS-ME Section (R. Maccaferri)
- now work on 3 areas in parallel, overall
 10 persons (with F. Savary, L. Oberli)
- arc electrical tests started
- may need a dedicated person for MEL tests (and for overall coordination?)

A few war stories ...

- ☐ Sector 8-1: repair of IFS in-situ (P. Dos Santos Campos, V. Parma)
 - origin of problem: accidental arc during welding
 - > CA: dry runs, improve electrical insulation of welding head
- ☐ Sector 3-4: SSS233 damage
 - origin of problem: large leak in V line flange material, damage to beam screen during cutting of PIM
 - > crash campaign to disconnect, return to surface, on Monday 22 Jan. in SM18, SMI2, will be re-installed in tunnel next Sunday 4 February
- ☐ Sector 3-4: MB1159 in-situ repair
 - origin of problem: large leak on V line
 - ➢ first time success in replacing the flange in-situ, cutting and welding (F. Savary, M. Duret)
- ☐ Sector 8-1: repair of beam screen in-situ (VAC, credit to A. Poncet)
 - origin of problem: wrongly mounted PIMs, badly cut and extracted
 - > PIM cutting activity totally internalised by CERN
 - ➤ VAC (P. Cruikshank, P. Garritty, D. Chauville): repositioned nested bellows, beam screen, testing, welding of fixed point)



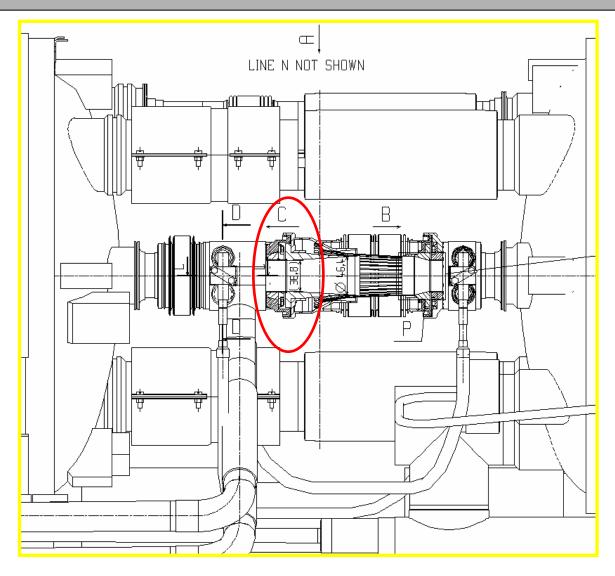
A few war stories ctd....

- □ Sector 4-5: one wrong W bellows installed (30 cm too long ...)
 □ several damaged PIMs detected just at closure (dents, scratches...): investigations ongoing (D. Tommasini, ICIT, IEG ...)
 □ 4 large V line flange material leaks (4-5 SSS184, SSS233, MB1159, 3-4 this week): metallurgy investigations ongoing
 - would be interesting to have a VAC update presentation
- □ several damaged K flexibles found, possible accidental arc damage during welding, poor welding at Manufacturer (BOA)
- ☐ Sector 3-4:
 - recent errors in cabling of line N (x6)
 - some (3-4) NCR AIV1 tests, low octupole resistance, investigations ongoing, results pending: MEL support needed also for diagnostics of test results to allow IC work to continue
- ☐ films/clips traveling from 1 to 8 soon available, e.g.:

G:\Workspaces\s\Sector81Interconnect\Sector 8-1\Photos and videos 8-1 (or Public F. Bertinelli)



MB1159 and others: in-situ repair ...





MCS-ET (F. Savary) + other technical support

AT-MCS

